

# Medical Nutrition Therapy (MNT)

- ❖ Medical Nutrition Therapy (MNT) is important in preventing diabetes, managing existing diabetes, and preventing, or at least slowing, the rate of development of diabetes complications. MNT continues to be an integral component of diabetes management and of diabetes self-management education (ADA, 2008).
- ❖ MNT should be individualized, based on the person's metabolic needs, food preferences, and willingness to make lifestyle changes.
- ❖ A registered dietitian (RD), licensed in South Dakota, who is knowledgeable and skilled in implementing diabetes medical nutrition therapy should be the team member with primary responsibility for nutrition care and education.
- ❖ Weight loss is recommended for all overweight and obese individuals and should include structured programs emphasizing lifestyle changes, behavior modification, education, reduced energy and fat intake, and exercise.
- ❖ The ADA (2008) has revised its recommendations for weight loss to include either low-carbohydrate or low-fat calorie-restricted diets for short-term use of up to one year.
- ❖ For patients using low-carbohydrate diets, healthcare providers should monitor lipid profiles, renal function, and protein intake in patients with nephropathy, and adjust hypoglycemic therapy as needed (ADA, 2008).

## What is Medical Nutrition Therapy?

MNT consists of nutrition assessment and the development of an individualized nutrition prescription based on treatment goals. MNT should be customized for each individual, taking into account age, cultural beliefs, weight, lifestyle, and other related medical, social, or psychological conditions. Nutrition counseling should be sensitive to the personal needs and willingness and abilities of the individual to make healthy lifestyle changes associated with diabetes or pre-diabetes.

To achieve nutrition-related goals, a coordinated team effort should include the person with diabetes and involve him or her in the decision-making process. A comprehensive assessment should include sensitivity to cultural, ethnic, and financial considerations, willingness to change, and ability of the individual to incorporate the lifestyle changes associated with a comprehensive self-management education program. Although it is recommended that a registered dietitian be the team member who plays the leading role in providing nutrition care, it is important that all team members including physicians and nurses be knowledgeable about MNT and support its implementation.

## What are the goals of Medical Nutrition Therapy?

According to the ADA (2008), the overall goals of MNT apply to individuals at risk for diabetes, those with pre-diabetes, and individuals with existing diabetes. Additionally, specific consideration should be given to the unique nutritional needs in the life cycle such as youth with type 1 diabetes, pregnant and lactating women, and older adults. The 2008 recommendations strive to make people with diabetes and healthcare providers aware of the beneficial interventions of MNT and include the latest scientific evidence-based practice recommendations.

## **Prevention and Treatment**

1. Delay or halt the development of diabetes (primary prevention interventions).
2. Reduce the prevalence of obesity and pre-diabetes.
3. Decrease the risk of diabetes and cardiovascular disease (CVD) by promoting healthy food choices and physical activity leading to moderate, maintainable weight loss.
4. Manage existing diabetes and prevent or slow the rate of developing the long-term complications of diabetes such as renal disease, neuropathy, retinopathy, hypertension, and cardiovascular disease.
5. Achieve and maintain blood glucose levels in the normal range or as close to normal as is safely possible.
6. Maintain blood lipid levels that reduce the risk for macrovascular disease.
7. Maintain blood pressure levels in the normal range or as close to normal as is safely possible that reduce the risk for vascular disease.
8. Provide adequate calories for maintaining or attaining body weight goals, and for normal growth and development in children, during pregnancy and lactation, and older adults.
9. To maintain the pleasure of eating by only limiting food choices when indicated by scientific evidence.
10. Improve health through healthy food choices and physical activity while considering personal and cultural preferences and lifestyle, respectful of the individual's wishes and willingness to make lifestyle changes.
11. For individuals treated with insulin or insulin secretagogues, to provide self-management training for the safe conduct of exercise, including the prevention and treatment of hypoglycemia, and diabetes treatment during acute illness.

## **What are the components of a nutrition prescription/meal plan?**

1. Calories based on individual needs and weight management goals.
2. A dietary pattern that includes carbohydrates from fruits, vegetables, whole grains, legumes, and low-fat milk is recommended. Carbohydrate counting is an integral part of nutritional self-management.
3. Protein should provide 10 to 20 percent of total energy intake.
4. Saturated fat should be limited to < 10 percent of total energy intake.

## **What is the recommended nutrition therapy for someone with type 1 diabetes?**

1. Follow the ADA protocols for medical nutrition therapy for type 1 diabetes.
2. In the first three months after diagnosis, three to four appointments with a registered dietitian.
3. Four routine follow-up visits per year with dietitian.

## **What is the recommended nutrition therapy for someone with type 2 diabetes?**

1. Follow the ADA protocols for medical nutrition therapy for type 2 diabetes.
2. Up to four routine follow-up visits per year with a registered dietitian.

**References:**

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